Notice of Allowability	Application No.	Applicant(s)	
	10/720,159	KITANI ET AL.	
	Examiner	Art Unit	
	Amare Mengistu	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Nov.25,2003*.

2. ☒ The allowed claim(s) is/are *1-12*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 11/25/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Amare Mengistu
Primary Examiner

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Remus Fetca on Thursday April 20, 2006.

The application has been amended as follows:

In the claim:

Cancel claim 13.

Allowable Subject Matter

1. Claims 1-12 are allowed.

2. The following is an examiner's statement of reasons for allowance: the cited prior arts (Kawase et al. and Wodnicki) has failed to teach applicants claimed invention "*A bidirectional shift register comprising: an output circuit that includes a first transistor having a conductive path between a first clock terminal and an output terminal and a second transistor having a conductive path between a power supply electrode and the output terminal; an input circuit that includes a third transistor having a conductive path between a forward direction pulse input terminal and a control electrode of the first*

transistor, a fourth transistor having a conductive path between a backward direction pulse input terminal and the control electrode of the first transistor and a fifth transistor having a conductive path between the power supply electrode and a control electrode of the second transistor; a reset circuit that includes a sixth transistor having a conductive path between a second clock terminal and the control electrode of the second transistor, a seventh transistor having a conductive path between a third clock terminal and the control electrode of the second transistor and an eighth transistor having a conductive path between the power supply electrode and the control electrode of the first transistor, which makes the path between the sixth transistor, the control electrode of the second transistor and a control electrode of the eighth transistor conductive as well as making the path between the fifth transistor and the seventh transistor non-conductive in forward direction pulse shift and which makes the path between seventh transistor, the control electrode of the second transistor and the control electrode of the eighth transistor conductive as well as making the path between the fifth transistor and the sixth transistor non-conductive in backward direction pulse shift; and an inversion preventing circuit that prevents inversion of a voltage level in the control electrode of the second transistor when a voltage level of a clock signal inputted to the first clock terminal is inverted in a state where the first transistor is on and the second transistor is off..."; and " an input circuit in which a pulse is inputted to a fifth transistor having a conductive path between a power supply electrode and a second transistor; an output circuit configured to output the clock signal inputted to the first clock terminal by a first transistor, and output a power supply voltage by the second transistor; a reset circuit

configured to make the path between a second clock terminal and the fifth transistor conductive as well as making the path between a third clock terminal and the fifth transistor non-conductive in forward direction pulse shift, to make the path between the second clock terminal and the fifth transistor non-conductive as well as making the path between the third clock terminal and the fifth transistor conductive in backward direction pulse shift; and an inversion prevention circuit that prevents inversion of a voltage level in the control electrode of the second transistor when a voltage level of a clock signal inputted to the first clock terminal is inverted in a state where the first transistor is on and the second transistor is off. ".

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (571) 272-7674. The examiner can normally be reached on M-F,T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3639. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amare Mengistu
Primary Examiner
Art Unit 2629

AM

4/24/06